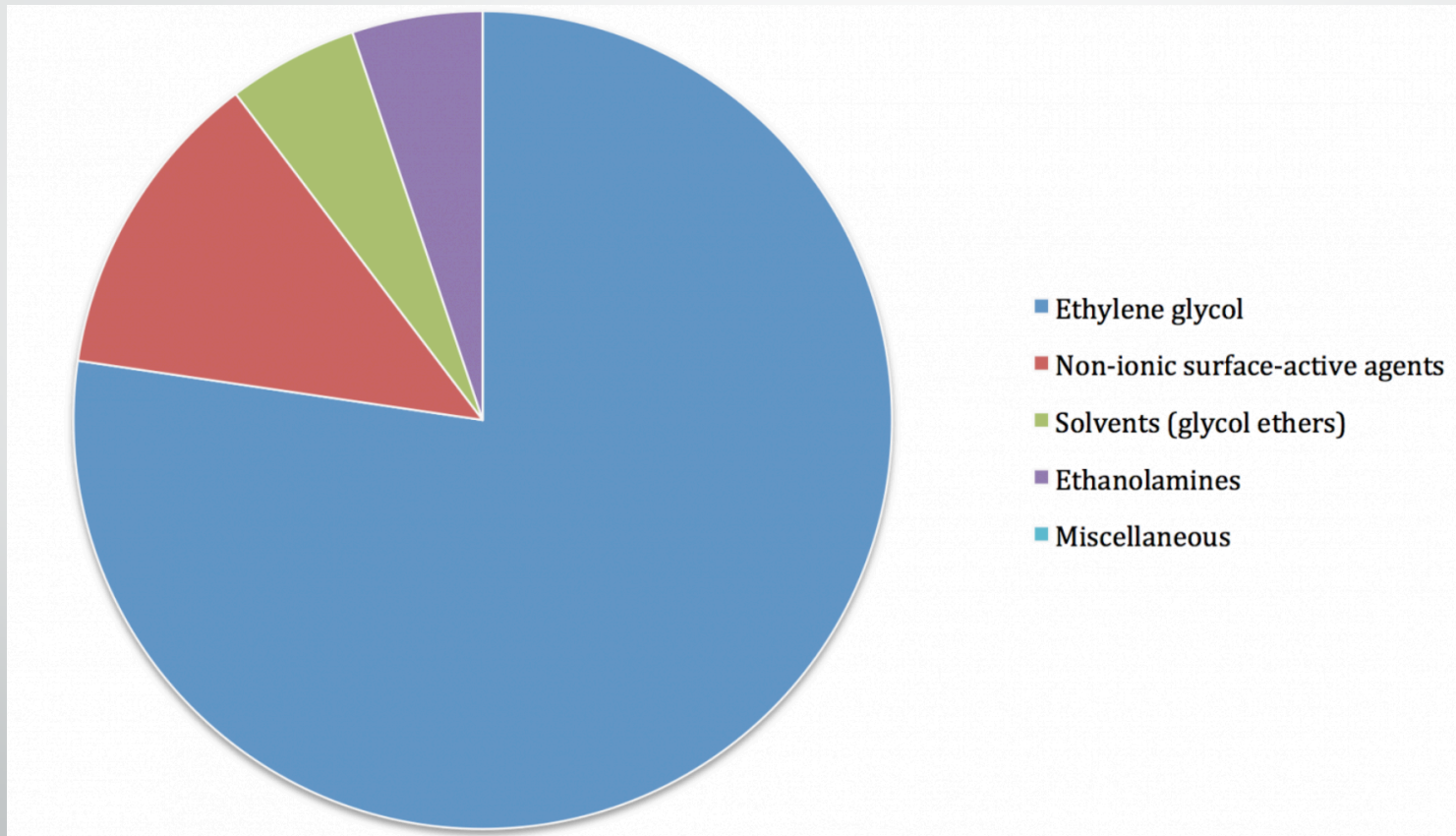


MycoMimic Business Plan

Sydney_Australia

Ethylene Oxide



The problem

- Produces calcium chloride as a by-product
- Highly selective silver catalyst
- Requires incredibly ($98\%>$) pure oxygen
- Toxic pollutants: formaldehyde and calcium chloride produced
- Conversion of 20-25% to CO_2
- Requires tightly controlled conditions

Bottom line:

- Use of ethylene oxide will increase
- Current production method is significantly detrimental to the environment



Australian Government

Department of Sustainability, Environment,
Water, Population and Communities



PARIS2015
UN CLIMATE CHANGE CONFERENCE
COP21•CMP11



THE UNIVERSITY OF
SYDNEY



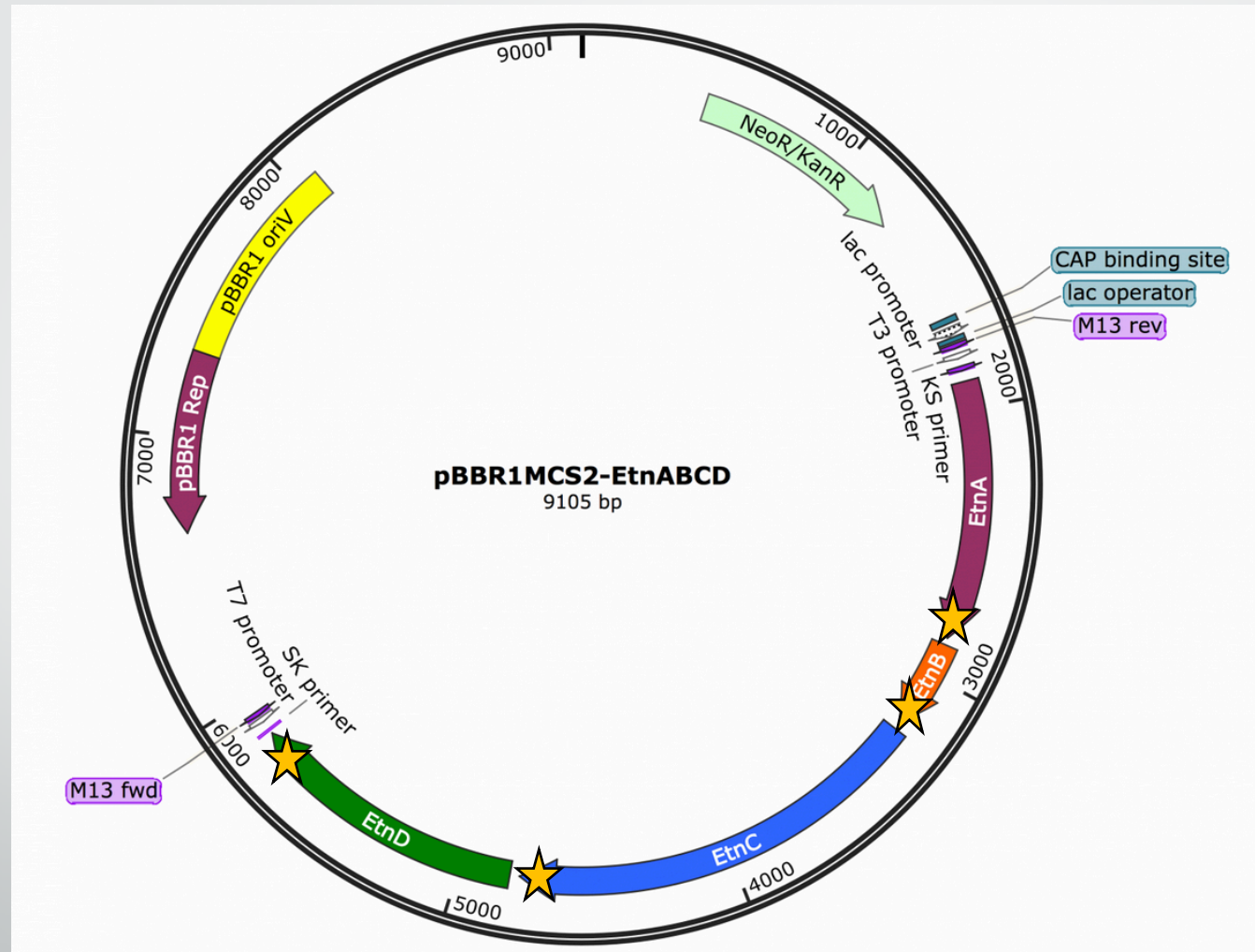
UNEP

United Nations Environment Programme

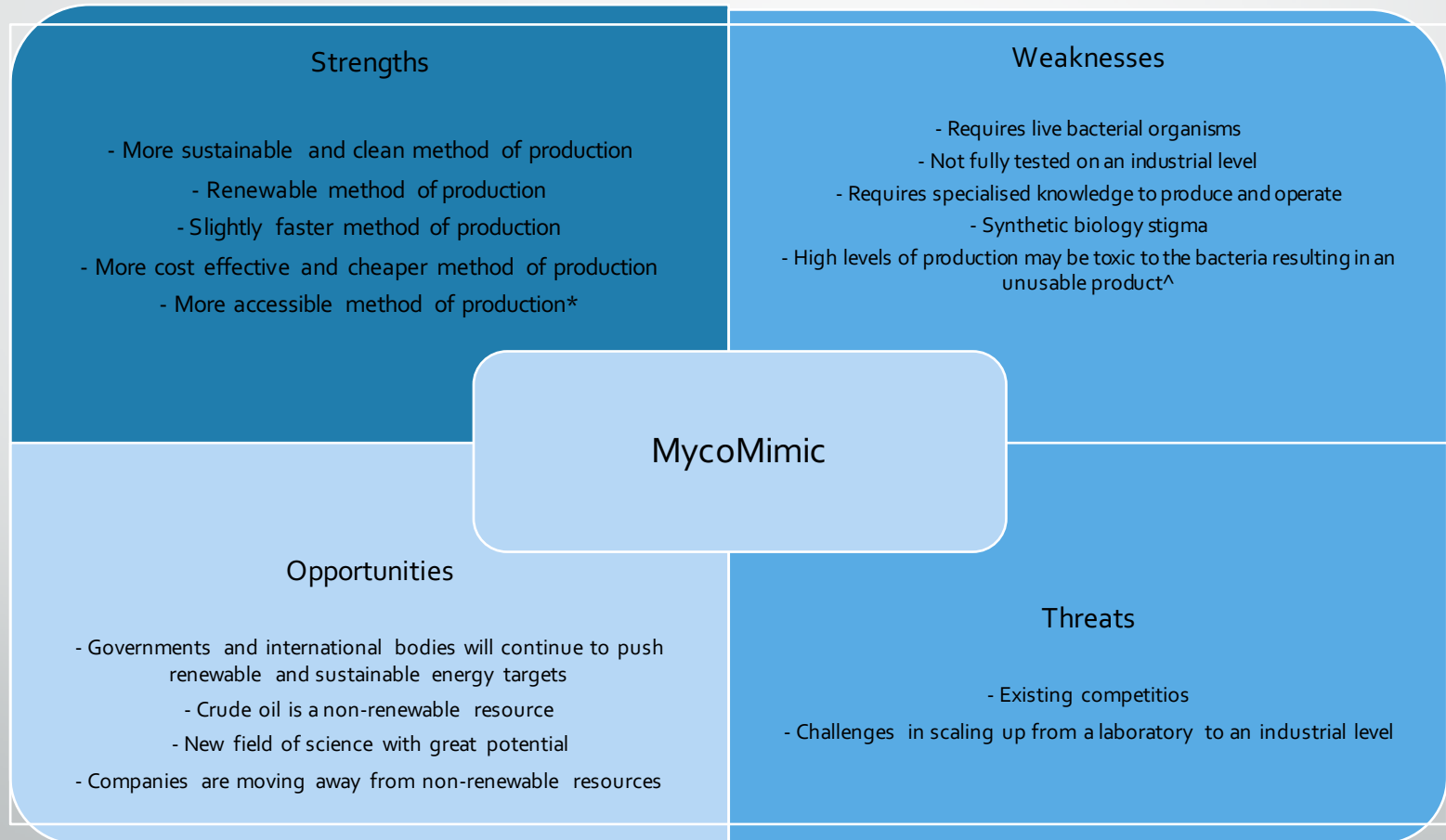
The solution

Bacterial production of ethylene oxide is a significantly better alternative to traditional chemical synthesis.





SWOT analysis



Assessing SWOT analysis

- Toxicity = we co-expressed the operon LacI which will stop the production of ethylene oxide before these levels are reached.
- Engagement with the NSW state government and received funding for our project
- Interaction with BioTechnology firms resulted in the development of our project into *E. coli*
- Interaction with the public to address concerns and oppositions



Conclusion

Incredibly effective, versatile, and necessary product in a time when the world is striving to improve environmental sustainability